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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,150	08/21/2003	Myung Jong Ki	P/2803-56	7175
2352 7590 05/30/2008 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403				
EXAMINER				
FRITZ, BRADFORD F				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,150

Applicant(s)

KI ET AL.

Examiner

BRADFORD F. FRITZ

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 5-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter (software per se). The Examiner notes that although the claims state a system this appears to be a misnomer because the claims are directed to the redirection agent and in at least one embodiment this may be entirely software, which fails to establish a statutory category of invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner notes that any claim rejected and not specifically addressed remains rejected because it depends for a rejected claim that is specifically addressed.

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
6. Regarding claims 1 and 10, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
7. Claim 1 recites the limitation "the contents". There is insufficient antecedent basis for this limitation in the claim.
8. Regarding claim 1, the phrase "when necessary" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.
9. Regarding claim 1, the phrase "instead the intermediary web server" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.
10. Claims 1 and 2 recite the limitation "the redirection agent". There is insufficient antecedent basis for this limitation in the claim.
11. Claim 1 recites the limitation "the control right". There is insufficient antecedent basis for this limitation in the claim.
12. Claim 1 recites the limitation "the web service". There is insufficient antecedent basis for this limitation in the claim.
13. Claim 1 recites the limitation "the user computer". There is insufficient antecedent basis for this limitation in the claim.

14. Claim 3 recites the limitation "the form action part". There is insufficient antecedent basis for this limitation in the claim.
15. Claim 3 recites the limitation "the original action URL". There is insufficient antecedent basis for this limitation in the claim.
16. Regarding claim 5, the phrase "request again a document" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.
17. Claim 5 recites the limitation "the hyper-text markup language (HTML) document". There is insufficient antecedent basis for this limitation in the claim.
18. Claim 5 recites the limitation "the final HTML document". There is insufficient antecedent basis for this limitation in the claim.
19. Claim 5 recites the limitation "the web browser". There is insufficient antecedent basis for this limitation in the claim.
20. Claim 5, the claim recites that "the redirection server which is always in the waiting state", which appears to be contradictory. The Examiner notes that this phrase renders the claim indefinite because how can the redirection server always be in the waiting state if earlier in the claim the redirection server passed along a document from the contents provider server.
21. Claim 5 recites the limitation "the redirection agent unit". There is insufficient antecedent basis for this limitation in the claim.
22. Claim 5 recites the limitation "the targets contents providing web server". There is insufficient antecedent basis for this limitation in the claim.

23. Claim 6 recites the limitation "the service". There is insufficient antecedent basis for this limitation in the claim. The Examiner notes that it is unclear if the service is intended to be the authentication service or the redirection service or the serving of the HTML document.

24. Claim 7 recites the limitation "the web service". There is insufficient antecedent basis for this limitation in the claim.

25. Claim 8 recites the limitation "the condition". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

26. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

27. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Ben-Shaul et al. (6,976,090), hereinafter referred to as Ben-Shaul.

28. Regarding claim 1, Ben-Shaul disclosed (a) instead the intermediary web server (column 9, lines 40-67 and column 23, line 49 – column 24, line 12, Fig. 18 - *edge server*); transmitting a request from the user computer received through the web page (column 9, lines 40-67 and column 23, line 49 – column 24, line 12), to the contents

provider web server (column 9, lines 40-67 and column 23, line 49 – column 24, line 12), and collecting a hyper-text markup language (HTML) document which the contents provider web server provides in response to the request (column 9, lines 40-67 and column 23, line 49 – column 24, line 12); (b) reconstructing the HTML document, by converting relative path uniform resource locators (URLs) of the contents such as a variety of form tags (column 39, lines 40-67 and column 23, line 49 – column 24, line 12), search common gateway interfaces (CGIs), images, icons, etc. contained in the HTML document (column 65, lines 50-64 and column 23, line 49 – column 24, line 12), into absolute path URLs and when necessary (column 9, lines 40-67 and column 23, line 49 – column 24, line 12), further performing additional conversion (column 9, lines 40-67 and column 23, line 49 – column 24, line 12); and (c) converting all form tags and hyperlink tags in the HTML document so as to be marked with the redirection agent of the redirection system and transmitting a converted HTML document to the user computer (column 9, lines 40-67 and column 23, line 49 – column 24, line 12), wherein contents providing services are provided with the redirection system continuously retaining the control right on the web service of the contents provider web server for the user computer (column 9, lines 40-67 and column 23, line 49 – column 24, line 12).

29. Regarding claim 2, Ben-Shaul disclosed wherein in the conversion of the hyperlink tags in the step (c), user authentication and session identification (ID) are given to the head part of each hyperlink tag (column 24, lines 29-35 and column 61, lines 2-67), and if service is provided, a common gateway interface (CGI) program of the redirection agent (column 39, lines 40-67 and column 65, lines 50-64), having a

redirection processing function for all hyperlinks contained in an HTML document provided by the contents provider server (column 23, line 49 – column 24, line 35), is added to the head part of each hyperlink tag, and original URLs are converted into a parameter form (column 23, line 49 – column 24, line 35).

30. Regarding claim 3, Ben-Shaul disclosed wherein in the conversion of the form tags in the step (c), the form action part of each form tag is replaced by a form transmission CGI program of the redirection agent (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), having a redirection processing function for all form transmissions in the HTML document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and the original action URL is added to a form input tag together with service ID registered in the web service profile information of the contents provider web server (column 61, lines 1-65).

31. Regarding claim 4, Ben-Shaul disclosed the step of performing management, registration, deletion, and modification of control rules (*policy tool editor*), absolute path conversion rules (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and limits on use frequency that are registered in order to secure a control right by using a redirection technique (column 61, lines 1-65).

32. Regarding claim 5, Ben-Shaul disclosed a redirection agent unit (Fig. 18, *on the edge server*) which operates in the form of a common gateway interface (CGI) program on the intermediary web server (column 65, lines 50-64 and Fig. 18), communicates with a redirection server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), requests again a document, which is requested by the user computer through

the Web page of the intermediary web server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), to the contents provider server through the redirection server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67 and Fig. 1), receives a document of the contents provider server through the redirection server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), performs additional conversion of the document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), reconstructs the hyper-text markup language (HTML) document for differentiated services (column 6, lines 23-37), and then transmits the final HTML document to the web browser of the user (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); and the redirection server which is always in a waiting state in preparation for a call (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and if the redirection agent unit makes a call and requests a document of a specific web service (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), in response to this, accesses a target contents providing web server and requests the document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), receives contents provided by the target contents providing web server, performs conversion of the contents (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and then transmits the contents to the redirection agent unit (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

33. Regarding claim 6, Ben-Shaul disclosed wherein the redirection agent unit comprises a first program which provides first redirection service (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), a second program which gives user

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authentication and session ID (column 61, lines 1-65), and if the service is provided, performs redirection processing for all hyperlinks contained in an HTML document provided by the contents provider server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and a third program which performs redirection processing for all form transmission in the HTML document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), as the CGI programs (column 65, lines 50-64).

34. Regarding claim 7, Ben-Shaul disclosed a web management tool (column 6, lines 23-37) which registers in a database and manages the web service of a target contents provider web server to be provided as differentiated services through the redirection system (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); and a specific converter which, based on redirection conversion tags on exceptional events registered in the web management tool (column 6, lines 23-37), performs conversion for exceptional tags (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), which are not standardized and an automatic document conversion module is not able to process, so that control right is retained (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

35. Regarding claim 8, Ben-Shaul disclosed wherein the redirection agent unit further comprises a parser unit which if an HTML document provided by the web service contains a character string satisfying the condition of a parsing tag registered through the web management tool (column 6, lines 23-37), replaces the character string with the contents written in a parser in order to provide additional application services (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

36. Regarding claim 9, Ben-Shaul disclosed wherein the registration item of the web management tool comprises at least one or a combination of items (column 6, lines 23-37), including URL information to access target web services (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), authentication information when fee-charging contents are provided (column 61, lines 1-65), and when conversion is needed to provide differentiated services (column 61, lines 1-65), parsing tags to distinguish a part to be converted in an HTML document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and document transformation parser information (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and redirection conversion tags for exceptional events (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

37. Regarding claim 10, Ben-Shaul disclosed a virtual hypertext transfer protocol (HTTP) agent which accesses the target contents providing web server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), requests a document in a GET or POST method, collects the document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and stores the collected document in a cache area for each user (column 1, lines 40 - 55); an HTML converter which analyzes the contents of the HTML document which is collected and temporarily stored in the cache directory for each user by the virtual HTTP agent (column 1, lines 40 – 55 and column 4, lines 25-40), and automatically converts all contents defined by relative URLs among tags such as 'img', 'link', 'href', etc. in the document, into absolute URLs (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); and a redirection marker which marks

the redirection agent unit in the form tag and hyperlink parts so that the redirection system continuously retains the control right over all form tags and hyperlink tags in the HTML document temporarily stored before the document is transmitted to the user by the redirection agent (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), even though the user clicks on form transmission and hyperlinks (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

38. Regarding claim 11, Ben-Shaul disclosed wherein the redirection marker performs conversion of the hyperlink tags by which user authentication and session identification (ID) are given to the head part of each hyperlink tag (column 24, lines 29-35 and column 61, lines 1-65), and if service is provided, a common gateway interface (CGI) program of the redirection agent (column 65, lines 50-64), having a redirection processing function for all hyperlinks contained in an HTML document provided by the contents provider server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), is added, and original URLs are converted into a parameter form (column 23, line 49 – column 24, line 35 and column 39, lines 40-67).

39. Regarding claim 12, Ben-Shaul disclosed wherein the redirection marker performs conversion of the form tags by which the form action part of each form tag is replaced by a form transmission CGI program of the redirection agent (column 65, lines 50-64), having a redirection processing function for all form transmissions in the HTML document (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and the original action URL is added to a form input tag together with service ID registered in

the web service profile information of the contents provider web server (column 24, lines 29-35 and column 61, lines 1-65).

40. Regarding claim 13, Ben-Shaul disclosed a user session management which grants, maintains, and manages a session ID to a user using the redirection system (column 24, lines 29-35 and column 61, lines 1-65); a cache area management which generates an independent cache directory for each user (column 1, lines 40 – 55 and column 4, lines 25-40), and maintains and manages the directories till the user finishes the session of the redirection system (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); and a target web site session management which maintains and manages session information such as authentication information (column 1, lines 40 – 55 and column 4, lines 25-40), cookie, etc. of the web service of the target contents providing web server accessed by the virtual HTTP agent and if there are continuous requests for documents, maintains the connection (column 1, lines 40 – 55 and column 4, lines 25-40).

41. Regarding claims 14 and 15, Ben-Shaul disclosed a listener which is always waiting for a request from the redirection agent (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), and if there is a request, allocates a spare thread to handle the request (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); a request analyzer which analyzes the command and parameters requested by the redirection agent (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), determines the contents to be processed by the server, and calls related modules (column 23, line 49 – column 24, line 35 and column 39, lines 40-67); and a virtual

agent loader which in order to request web service to the web site of the target contents providing web server (column 23, line 49 – column 24, line 35 and column 39, lines 40-67), writes a script for calling the virtual HTTP agent module and makes a call for the virtual HTTP agent (column 1, lines 40 – 55 and column 4, lines 25-40).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRADFORD F. FRITZ whose telephone number is (571)272-3860. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/B. F. F./

Examiner, Art Unit 2141

/Andrew Caldwell/

Supervisory Patent Examiner, Art Unit 2142